IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A disc-shaped tool comprising:

a plurality of overlapping virtual regions so formed as to be surrounded by two radius lines extending from a rotation center of a disc-shaped base metal and two concentric circles on the base metal disposed around the rotation center continuously in a circumferential direction on the disc-shaped base metal, each virtual region overlapping each adjacent virtual region in the circumferential direction, while an entire slit is provided in each one of the virtual regions, the slit making contact with all of the two radius lines and the two concentric circles,

wherein a virtual region angle around the rotation center formed by the two radius lines from a same virtual region is equal to or less than 90°;

the virtual regions are 4 to 24 in number;

a central concentric circle located in a center of an interval of the two concentric circles forming the virtual region is in a range of 0.6 r to 0.8 r with respect to the rotation center of the base metal when a maximum gullet bottom radius of the base metal is r;

an overlapping of the virtual regions continuously adjoining each other is in a range of 0° to 12° in terms of a central angle around the rotation center, the central angle formed by two radius lines from adjacent virtual regions;

a minimum distance between adjacent slits is equal to or more than 0.05 r; and

a ratio of a length of an arc of the central concentric circle extending across all of the virtual region with respect to the interval of the two concentric circles in the virtual region is 3 to 6.

Claim 2 (Previously Presented): The disc-shaped tool according to claim 1 wherein each of the plurality of virtual regions has a same shape.

Claim 3 (Previously Presented): The disc-shaped tool according to claim 2 wherein the slits formed in the plurality of virtual regions are of the same shape.

Claim 4 (Withdrawn - Previously Presented): The disc-shaped tool according to claim 1 wherein 3-5 teeth are arranged at an edge of the base metal within each virtual region.